

## PATENT COOPERATION TREATY

PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference PCT-SCC-0403	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. <b>PCT/KR2004/001494</b>	International filing date(day/month/year) <b>22 JUNE 2004 (22.06.2004)</b>	Priority date (day/month/year) 19 NOVEMBER 2003 (19.11.2003)	
International Patent Classification (IPC) or national classification and IPC  <b>IPC7 A45F 3/08</b>			
Applicant  <b>SANCHEONG CO., LTD. et al</b>			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:
    - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_ containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).

## 4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand  <b>29 MARCH 2005 (29.03.2005)</b>	Date of completion of this report  28 SEPTEMBER 2005 (28.09.2005)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer  SHIN, HOON SIK  Telephone No. 82-42-481-8166 

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001494

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☒ This report is based on translations from the original language into the following language English which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☒ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished

- ☐ the description:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

- ☐ the claims:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

- ☐ the drawings:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

- ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001494

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-17	YES
	Claims		NO
Inventive step (IS)	Claims	1-17	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

**2. Citations and explanations (Rule 70.7)****1. Reference is made to the following document:**

D1: WO 97/30609 A

D2: US 5,346,419 A

D1 relates to a harness for holding and supporting a gas pressure-container including a backplate;

a pressure-container holding means on a first side of the backplate;

two elongated support means mounted on the backplate having their respective ends attached on the upper and lower position of the backplate;

a waist belt on the lower portion of the backplate;

a first element on the second side of the backplate extending parallel with the backplate which is pivotally mounted on the symmetry line of the backplate, to which each of the second ends of the elongated support means is fastened on a respective side;

a third element on the second side of the backplate extending parallel with the backplate which is pivotally mounted on the backplate to which each of the second ends of the elongated support means is fastened on a respective side a second element pivotally mounted on the backplate with a pivot shaft which is fastened with two slots and pins in order to prevent its rotation against the backplate.

D2 relates to a buoyancy compensator device having a pair of tank encircling straps for connecting of the backpack to a compressed air tank, inflation hoses for receiving air from a tank and inflating the buoyancy compensator device, valves for releasing air from the buoyancy compensator, a backpack portion for supporting the air tank, and a harness system for attaching the backpack and buoyancy compensator device to a wearer which includes adjustable shoulder straps and adjustable waist straps having a cummerbund for comfortably securing the buoyancy compensator around a wearer's torso.

(Continued on first Supplemental Box)

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.  
Continuation of:

Box V.

2. Reasoned statement with regard to novelty and inventive step.

The present invention relates to a backpack comprising a backplate with two shoulder straps having one end of each strap attached to the upper part, a gas container holding belt in the middle, and a pair of protruded bars for supporting said gas container at the lower portion;

a shoulder strap fastener attached with the other end of each shoulder strap at both ends respectively which is installed in parallel and combined on the rear lower portion of said backplate in a way of vertical rotation around a middle axis;

a panel-shaped waist guard displaced at the rear side of said shoulder strap fastener combined with said backplate in away of vertical rotation around a middle axis having a waist belt fastened to both ends so as to protect a wearer's waist and back;

and a rotation means which allows said shoulder strap fastener and said waist guard to be rotatably attached to said backplate.

D1 and D2 are the same to the present invention in the harness system having two shoulder straps having one end of each strap attached to the upper part of a backplate and the other end of each shoulder strap attached to both ends of a shoulder strap fastener respectively; and

a panel-shaped waist guard having a waist belt combined with a backplate so as to hold and air container. However, D1 and D2 do not disclose a shoulder strap fastener and a waist guard to be attached to the backplate in a way of vertical rotation around a middle axis and it is not obvious to a person skilled in the art.

Therefore, the subject matter of claims 1-17 is considered to be novel and to involve an inventive step under PCT Article 33(2) and (3).

3. Reasoned statement with regard to industrial applicability

The subject matter of claims 1-17 is considered to be industrially applicable under PCT Article 33(4).